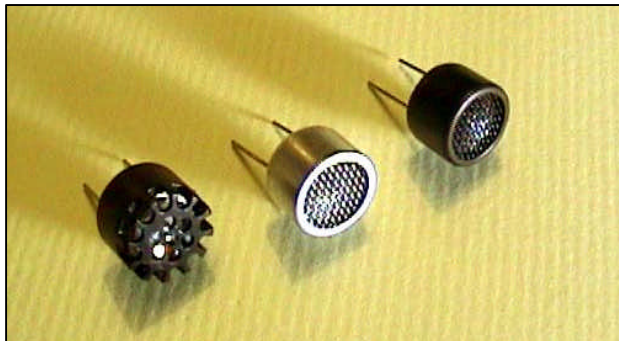
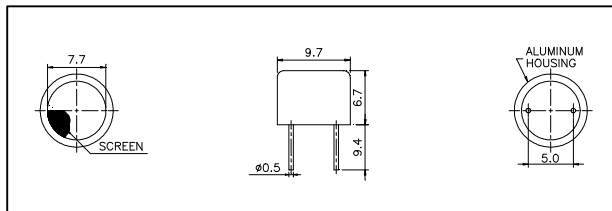


**PROWAVE Air Ultrasonic Ceramic Transducers 400ST/R100**



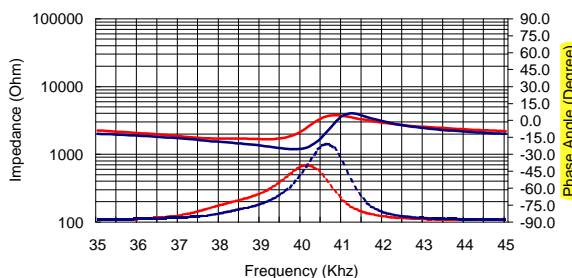
**Dimensions:** Dimensions are in mm



**Impedance/Phase Angle vs. Frequency**

Tested under 1Vrms Oscillation Level

400SR100 Impedance ———— (red line)  
400SR100 Phase ———— (blue line)  
400ST100 Impedance ······ (red dotted line)  
400ST100 Phase ······ (blue dotted line)

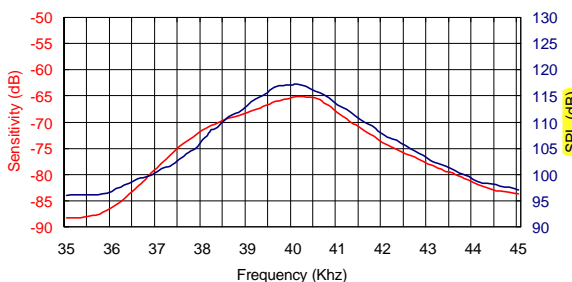


**Specification**

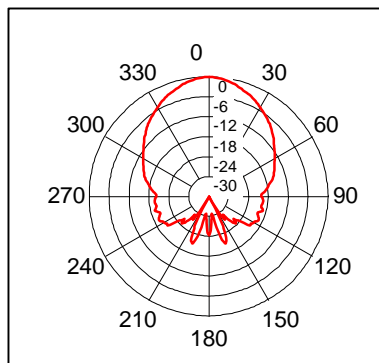
<b>400ST100</b>	Transmitter
<b>400SR100</b>	Receiver
<b>Center Frequency</b>	40.0±1.0Khz
<b>Bandwidth (-6dB)</b>	400ST100 2.5Khz 400SR100 3.0Khz
<b>Transmitting Sound Pressure Level</b>	112dB min.
at 40.0Khz; 0dB re 0.0002µbar per 10Vrms at 30cm	
<b>Receiving Sensitivity</b>	-70dB min.
at 40.0Khz 0dB = 1 volt/µbar	
<b>Capacitance at 1Khz</b>	±20% 1900 pF
<b>Max. Driving Voltage (cont.)</b>	10Vrms
<b>Total Beam Angle</b>	-6dB 72° typical
<b>Operation Temperature</b>	-30 to 80°C
<b>Storage Temperature</b>	-40 to 85°C

**Sensitivity/Sound Pressure Level**

Tested under 10Vrms @30cm



**Beam Angle:** Tested at 40.0Khz frequency



All specification taken typical at 25°C  
Closer frequency tolerance can be supplied upon request.

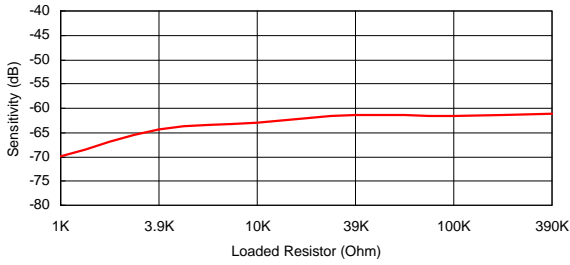
Model available:

1	400ST/R100	Aluminum Housing
2	400ST/R10B	Black Al. Housing
3	400ST/R10P	Plastic Housing

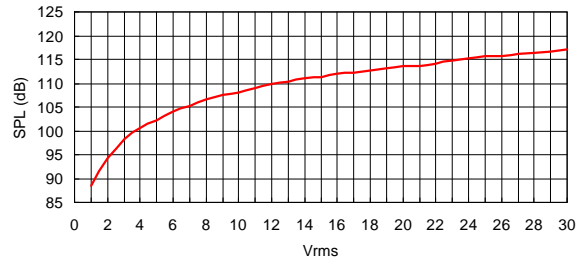
400SR100 Receiver

400ST100 Transmitter

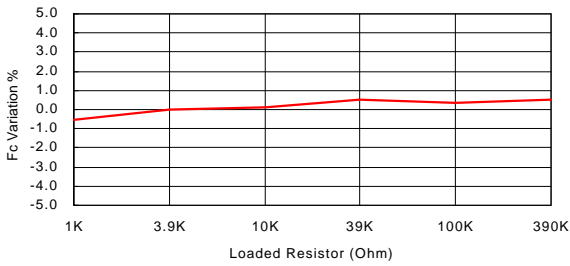
Sensitivity Variation vs. Loaded Resistor



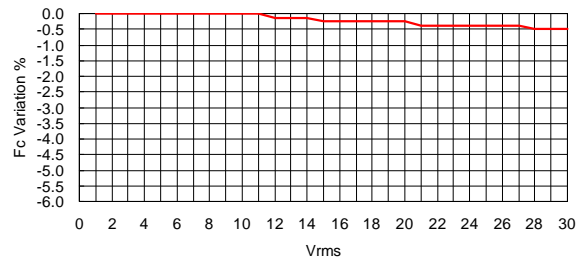
SPL Variation vs. Driving Voltage



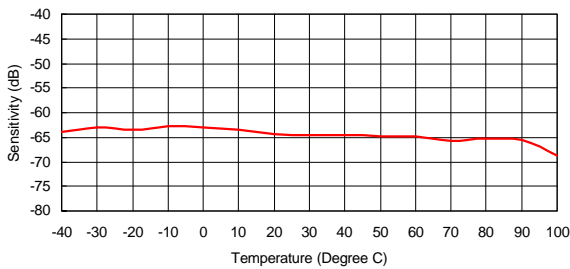
Center Frequency Shift vs. Loaded Resistor



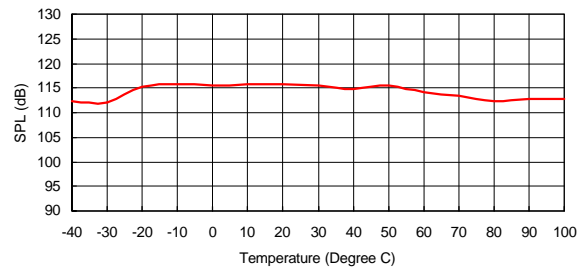
Center Frequency Shift vs. Driving Voltage



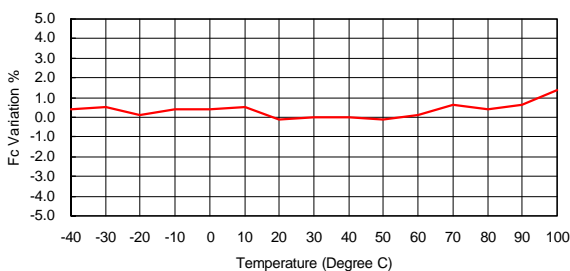
Sensitivity Variation vs. Temperature



SPL Variation vs. Temperature



Center Frequency Shift vs. Temperature



Center Frequency Shift vs. Temperature

